

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460



Office of Pesticide Programs

MEMORANDUM

1/28/2020

SUBJECT: Product Chemistry Review for **ReducX** EPA Reg. No.: **63838-EI**

FROM: Narayanan Parthasarathy
Chemistry and Toxicology Team
Product Science Branch
Antimicrobials Division (7510P)

THRU: Karen P. Hicks, Team Leader
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Antimicrobials Division (7510P)

01/28/2020

TO: Kathryn Montague, PM Team 33 / Terria Northern
Regulatory Management Branch I
Antimicrobials Division (7510P)

Registrant: ENVIRO TECH
CHEMICAL SERVICES INC
Action code: A541

Agency Due Date: 2/26/2020

DP No.: 453504

Submission No.: 1037181

E-Sub No.: 40861

Classification: EP

Process: Integrated system

Pesticide type: Disinfectant

MRID(s):50892101 & 50892102

Formulation from label			
PC code(s)	CAS #(s)	Active Ingredient(s)	% weight
063201	79-21-0	Peroxyacetic acid	8.4%
000595	7722-84-1	Hydrogen Peroxide	7.6%
128919	124-07-2	Octanoic Acid	5.1%
		Other Ingredients	78.9%
		Total	100.0%

I. BACKGROUND

The Registrant, ENVIRO TECH CHEMICAL SERVICES INC, has submitted an application for pesticide registration for their product: ReducX, EPA Reg. No. 63838-EI.

II. RELEVANT DOCUMENTS

	RECEIVED	N/A
EPA FORM 8570-27 – Formulator’s Exemption Statement	<input checked="" type="checkbox"/>	<input type="checkbox"/>
EPA FORM 8570-35 – Data Matrix (7/5/2019)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Cover letter (7/5/2019)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Transmittal document	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Proposed CSF BASIC, (12/18/2019)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Proposed label, (7/5/2019)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Certification for Pilot Fragrance Notification Program	<input type="checkbox"/>	<input checked="" type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>
REFERENCED: CSF	--	
Comments:		

III. FINDINGS

a. Product Formulation:

	TGAI	MUP	EUP	Food use	Non-food use
Non-integrated	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Integrated	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>		
Active Ingredients(s)			Nominal	Upper limit	Lower limit
Peroxyacetic acid			8.4%	9.07%	7.73%
Hydrogen Peroxide			7.6%	8.21%	6.99%
Octanoic Acid			5.1%	5.51%	4.69%
			YES	NO	N/A
1. The certified limits of all ingredients are within 40 CFR standard certified limits.			<input type="checkbox"/>	<input checked="" type="checkbox"/>	
2. Wider certified limits were requested and rationale was accepted.			<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

3. The nominal concentration(s) of the active ingredient is in agreement with the label.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
4. The chemical IDs and analytical information for density, pH, and flammability are consistent with Series 830 Group B data.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
5. All inert ingredients are approved for non-food use pesticide formulations.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. The impurities present >0.1% are identified.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
7. Impurities of toxicological significance have an upper certified limit.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

b. Product Label:

	Yes	NO	N/A
<i>The formula contains one of the following:</i>			
1. 10% or more of petroleum distillate	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2. 1.0% or more of methyl alcohol	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3. Sodium nitrite at any level	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
4. A toxic list 1 inert at any level	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
5. Arsenic in any form	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
6. If yes to 1-5, then the inert ingredient list contains a relevant footnote	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
7. Appropriate warning statements regarding flammability or explosive characteristics of the product are included on the label	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
8. The storage and disposal instructions for the pesticide container are in compliance with PR Notice 84-1 for household use products or PR Notice 83-3 for all other uses.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. The product requires an expiration date at which time the nominal concentration falls below the lower certified limit.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

IV. Additional Findings

1. Post-Reaction Basic CSF (12/18/2019) contains an a.i from unregistered source. The registrant had provided preliminary analysis (830.1700) of 5-batches for all the three a.i's.
2. Post-Reaction Basic CSF (12/18/2019) is acceptable.
3. The registrant had met Product Chemistry Group A & B 830 guidelines with the exception of Storage Stability (830.6317) and Corrosion Characteristics (830.6320).

V. Conclusion

Post-Reaction Basic CSF (12/18/2019) is acceptable. The registrant had met Product Chemistry Group A & B 830 guidelines for end-use, integrated, non-food use disinfectant, ReducX, EPARN 63838-EI, with the exception of Storage Stability (830.6317) and Corrosion Characteristics (830.6320) which should be provided upon completion.

VI. Table A:
Series 830 guidelines – Group A

OPPTS#	Name	Status	MRID
830.1550	Product Identity & Composition	Acceptable	50892101
830.1600	Description of materials	Acceptable	50892101 & CSF
830.1620	Description of production process	Acceptable	50892101
830.1650	Description of formulation process	Acceptable	50892101
830.1670	Discussion of formation of impurities	Acceptable	50892101
830.1700	Preliminary analysis	5-Batch analysis of three a.i's were provided-acceptable	50892101
830.1750	Certified limits	Acceptable	50892101
830.1800	Enforcement analytical method	Acceptable	50892101
830.1900	Submittal of samples	Be provided upon request	50892101

VII. Table B: Series 830 guidelines – Group B

OPPTS#	Name	Study Findings/Comment	Status	MRID
830.6302	Color	Not required for end use product	Acceptable	N/A
830.6303	Physical state	liquid	Acceptable	50892102
830.6304	Odor	Not required for end use product	Acceptable	N/A
830.6313	Stability to normal & elevated temperatures, metals & metal ions	The product is not TGA1	Not applicable	N/A
830.6314	Oxidation/Reduction	ReduX contains hydrogen peroxide and peroxy acetic acid which are common oxidizing agents. Contacts with alcohols, aldehydes and thiols should be avoided. These chemicals react slowly with ammonia and organic and inorganic ammonium compounds. The product should not be allowed to contact with monoammonium phosphate or soft metals such as iron, copper, zinc and brass. Octanoic acid is unreactive to reducing agents.	Acceptable	50892102
830.6315	Flammability	Product is not potentially flammable	Acceptable	50892102
830.6316	Explosibility	Product does not contain explosive ingredients	Not applicable	50892102
830.6317	Storage stability	The study is in progress	In progress	50892102
830.6319	Miscibility	Product not mixed with organic solvents	Not applicable	N/A
830.6320	Corrosion characteristics	The study is in progress	In progress	50892102
830.6321	Dielectric breakdown voltage	Product not used near electrical equipment	Not applicable	N/A
830.7000	pH	1% solution, pH2.38	Acceptable	50892102
830.7050	UV/Visible absorption	Not required for MUP or EP	Not applicable	N/A
830.7100	Viscosity	Kinematic Viscosity = 2.52 and 1.72 /mm ² /s at 20°C & 42°C respectively.	Acceptable	50892102
830.7200	Melting point	Not required for MUP or EP	Not applicable	N/A
830.7220	Boiling point	Not required for MUP or EP	Not applicable	N/A
830.7300	Density/relative	1.098gm/ml	Acceptable	50892102

830.7370	Dissociation constants in water	Not required for MUP or EP	Not applicable	N/A
830.7520	Particle size	Not required for MUP or EP	Not applicable	N/A
830.7550/ 7560/ 7570	Partition coefficient	Not required for MUP or EP	Not applicable	N/A
830.7840/ 7860	Water solubility	Not required for MUP or EP	Not applicable	N/A
830.7950	Vapor pressure	Not required for MUP or EP	Not applicable	N/A

CONFIDENTIAL APPENDIX
CSFs

